



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/289,327	04/08/1999	JEFFREY B. SAMPSELL	KLR:7146.021	8458

7590

08/30/2002

KEVIN L RUSSELL  
CHERNOFF VILHAUER MCCLUNG & STENZEL L.L.P.  
1600 ODS TOWER  
601 SW SECOND AVENUE  
PORTLAND, OR 97204

EXAMINER

MACK, RICKY LEVERN

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 08/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/289,327

Applicant(s)

SAMPSELL ET AL.

Examiner

Ricky L Mack

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-112 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-102 and 105-112 is/are allowed.
- 6) ☒ Claim(s) 1,5,14,17-24 and 103 is/are rejected.
- 7) ☒ Claim(s) 2-4,6-13,15,16 and 104 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Detailed Action*.

## **DETAILED ACTION**

### ***Withdrawal of Allowance***

1. Prosecution on the merits of this application is reopened on claims 1, 5, 14, 17-19 and 103 are considered unpatentable for the reasons indicated below:

Claims 1, 5, 14, 17-19 and 103 are rejected under 35 U.S.C. 102(e) as being anticipated by Conner et al. (6273567).

2. Applicant is advised that the Notice of Allowance mailed 5/13/02 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

3. The indicated allowability of claims 1, 5, 14, 17-19 and 103 is withdrawn in view of the newly discovered reference(s) to Conner et al. (6273567). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 14 and 20-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2873

In claim 14, it is not clear as to where in the structure a plurality of ports is located and the Examiner views this limitation to broadly mean a location when light enters a similar structure.

In claim 20, lines 4-6, the limitation of “separating said light beam into at least one light component polarized differently than another light component, *wherein substantially all of said light beam is transmitted*” render the claim indefinite because it is not clear as at what point of the process the light beams are transmitted. It is not clear if the transmission is directed to when polarization occurs or the separation of components. For the purpose of examination, the Examiner interprets this limitation as to be directed to when polarization occurs.

Claims 21-24 are rejected based upon their dependence from a rejected claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2873

7. Claims 1, 5, 14, 17-19 and 103 are rejected under 35 U.S.C. 102(e) as being anticipated by Conner et al. (6273567).

Conner discloses, an apparatus as in claim 1 with inherent steps to claim 103, a polarization converter comprising an optics array (60) capable of separating said light beam into at least one light component polarized differently than another light component (col. 5, lines 19-26), wherein said one light component and said another light component are within a single said light beam (62), and wherein said light component has a different color than said another light component (*blue & green*, col. 5, lines 20-23).

Regarding claim 5, Conner discloses at least dichroic filter (60).

Regarding claim 14, Conner discloses a plurality of light input ports (76, 82).

Regarding claim 17, Conner discloses said light source produces light having three light components (*white light having red, blue and green components*) and said optics array separates said light so that two of said light components have the same polarization, which is different than the polarization state of the third light component (col. 5, lines 19-30).

Regarding claim 18, Conner discloses that said three light components are red, blue and green and said red component is polarized differently from said blue and green component (col. 5, lines 20-23).

Regarding claim 19, Conner discloses said optics array separates said two light components so that one of said components has a s-polarization and the other light component has p-polarization (col. 5, lines 20-23).

*Allowable Subject Matter*

8. Claims 25-102 and 105-112 are allowed.
9. Claims 2-4, 6-13, 15, 16 and 104 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. Claims 20-24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
11. The following is an examiner's statement of reasons for allowability: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 2-4, 6-13, 15, 16, 20-102 and 104-112, wherein a polarization converter and a method for projecting light comprises a ratio of the initial light étendue to an optics array; dichroic filters sandwiched between quarter-wave plates; first and second dichroic filters positioned down an optical path from a polarizing beam splitter; and/or light-component-specific images introduced in the projection system, as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky L Mack whose telephone number is (703) 305-6984. The examiner can normally be reached on Monday-Friday (6:30 AM to 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone numbers for the

Art Unit: 2873

organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

RM  
August 14, 2002



RICKY MACK  
PRIMARY EXAMINER